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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,548	12/01/2000	Noboru Okada	P100158-00019	3094

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT PAPER NUMBER

1733

DATE MAILED: 07/03/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,548

Applicant(s)

OKADA ET AL.

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The abstract of the disclosure is objected to because it is not in single paragraph form and is too long. "The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited." Correction is required. See MPEP § 608.01(b).

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 8-9 and line 14 as well as part (5) of claim 1, the term "sheet-like" is indefinite as it is not clear in what way it is "like" a sheet. It is suggested that "like" be deleted. Analogous ambiguities are present at corresponding locations of claim 5.

At parts (3) and (6) of claims 1 and 5, the phrase "a rubber parts" is grammatically awkward.

In claims 3, 4, 7 and 8, antecedent for the reference to "the injection unit" is indefinite as there are more than one injection units referred to in the independent claims. Also, in these same claims, "for every parts" is grammatically awkward and confusing.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie (US 4,468,267) taken with JP 59-93345 to Yokohama, Brown et al. (US 5,554,242), Laurent (US 4,963,207), EP 958,913 to Okada et al. and optionally EP 875364 to Pirelli.

In tire building, two-stage tire forming systems that include a band forming machine (i.e. first stage machine), a tire shaping/forming machine (i.e. second stage) and a belt/tread forming machine along with the accompanying servicers for the various layers/components are extremely well known in this art – Irie is merely exemplary. Claims 1 and 5 additionally require that the inner liner and carcass ply suppliers be adapted to supply the layers having a width corresponding to the drum periphery and cut to a length corresponding to the desired ply width. JP 59-93345 to Yokohama discloses this same concept for applying various tire plies, this being taught to avoid the need for stocking materials for the different sizes being applied as well as improving

quality – note the abstract and figure. To apply the carcass and liner in this manner and with such device would thus have been obvious.

Claims 1 and 5 also define a band (and tread) rubber part supply means/process in the form of a device adapted to form and wind a rubber strip to a desired profile. In this art, however, it is well known and established that direct strip winding of the various rubber parts of the tire, including those of the first stage tire band (as well as the extremely well known strip winding of treads), is advantageous in terms of reducing the need for intermediate components storage (and all the problems associated therewith) as well as well as facilitating quick tire size/type changeover – note esp. cols. 1-2 of Brown as well as col. 2, lines 15-24 of Laurent. To direct strip wind such components would therefore have been prima facie obvious and lead to only the expected results. The normal and typical extrusion used in such processes would seem to read on the claimed use of a “injection unit” – in any event (and for claims 3, 4, 7 and 8), a piston or plunger type unit is also known and used in this art to apply precise quantities of rubber - note Laurent (esp. col. 4, lines 3+ - note that this extruder uses a piston), use of such being therefore obvious to allow more precise rubber application.

Claims 1 and 5 also define that the belt supply process/means are formed by rubberizing strips which are spliced to form the belt – such processing is however known, desirable and obvious in this art as a known way to avoid the need for storage of plies for every tire size – note EP 958,913 to Okada et al. (esp. cols. 1-2 and fig. 1).

The noted claims thus are considered to merely combine known and desirable expedients in this art for only their expected advantages, it being emphasized further

that in each case, it is apparent that one of the known advantages of these various processes is the ability to more easily adapt to changing size requirements for the components (and thus also thereby avoid the need for more storage of more different components). EP '364 to Pirelli has been cited as additional evidence showing that the artisan further understands that adapting a given tire building line to build different tire sizes is known and desirable in this art (e.g. col. 6, lines 1-10).

6. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie (US 4,468,267) taken with JP 59-93345 to Yokohama, Brown et al. (US 5,554,242), Laurent (US 4,963,207), EP 958,913 to Okada et al. and optionally EP 875364 to Pirelli as applied to claims 1, 3-5, 7 and 8 above, and further in view of EP 624,456 to Krupp.

Given that it is considered to be known and desirable to build different tire sizes/types on the same tire building line, it is considered that the ordinary artisan would have readily appreciated that a bead supply means that holds various tire bead types would have been necessary and obvious. EP '456 to Krupp further provides evidence that the artisan knows how to design a bead supply means that can easily adapt to changing bead sizes and thereby enables rapid size changes – note the abstract. To provide a bead supply means that can hold different beads would therefore have been obvious and lead to only the expected results when one desires to build different tire types with rapid changeover.

7. Note: On March 2, 2001, a paper entitled "Claim for Priority" and addressed to serial number 09/726,548 was received along with a certified copy of JP 11-341621. An examination of the document as well as the given title indicates that this was not


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intended for this application. Clarification is required, it being noted that the proper certified priority document for the present application was also received.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
June 28, 2002